```
=> s strontium and sitosterol
L2          12 STRONTIUM AND SITOSTEROL

=> d l2 scan

L2    12 ANSWERS   CAPLUS  COPYRIGHT 2007 ACS on STN
CC   18-13 (Animal Nutrition)
     Section cross-reference(s): 9
TI   Tracer microspheres as a fecal marker in balance studies
ST   feces marker nutrition balance; chromium 51 microsphere; strontium
     85 microsphere; microsphere feces marker
IT   Digestibility
        (determination of, chromium-51 and strontium-85 as markers for)
IT   13967-73-2, biological studies   14392-02-0, biological studies
     RL: BIOL (Biological study)
        (as fecal marker)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> s l2 and ?glycer?
L3           3 L2 AND ?GLYCER?

=> d l3 1-3 ibib ab

L3   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2006:401149  CAPLUS <<LOGINID::20071115>>
DOCUMENT NUMBER:          144:419729
TITLE:                    Reverse micelle composition for delivery of metal
                          cations comprising a diglyceride and a
                          phytosterol and method of preparation
INVENTOR(S):              Maurel, Jean-Claude
PATENT ASSIGNEE(S):       Medesis Pharma, Fr.
SOURCE:                   Eur. Pat. Appl., 24 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     EP 1652512            A1    20060503    EP 2004-25987           20041102
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
             HR, IS, YU
     AU 2005300253         A1    20060511    AU 2005-300253          20051102
     CA 2584684            A1    20060511    CA 2005-2584684         20051102
     WO 2006048773         A1    20060511    WO 2005-IB3605          20051102
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
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EP 1807048 A1 20070718 EP 2005-804076 20051102
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
IN 2007DN03909 A 20070831 IN 2007-DN3909 20070524
PRIORITY APPLN. INFO.: EP 2004-25987 A 20041102
WO 2005-IB3605 W 20051102

AB The present invention relates to a method for the preparation of reverse micelles based on sterols, acylglycerols and metal salt and to reverse micelles obtained thereby. The reverse micelles are stable to cross mucosa and then cellular membranes, thus they allow internalization of metal ions by target cells and they are advantageously useful in the pharmaceutical and dietetic fields. For example, to sitosterol solubilized in ethanol, an aqueous solution containing vanadyl sulfate and Peceol was added. Sonication of the mixture was carried out to give a homogeneous mixture of stable reverse micelle containing vanadium. An antidiabetic activity of the reverse micelle in type II diabetes rats was demonstrated.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:431232 CAPLUS <<LOGINID::20071115>>
DOCUMENT NUMBER: 142:469311
TITLE: Strontium-based complexes, pharmaceuticals and dietetic products
INVENTOR(S): Maurel, Jean Claude; Cudennec, Claude Alain; Poucheret, Patrick
PATENT ASSIGNEE(S): Medesis Pharma Sa, Fr.
SOURCE: Fr. Demande, 22 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2862224	A1	20050520	FR 2003-13357	20031114
CA 2545082	A1	20050602	CA 2004-2545082	20041115
WO 2005049038	A1	20050602	WO 2004-FR2912	20041115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1682156	A1	20060726	EP 2004-805452	20041115
EP 1682156	B1	20070124		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
AT 352308	T	20070215	AT 2004-805452	20041115
ES 2281026	T3	20070916	ES 2004-4805452	20041115
US 2007142306	A1	20070621	US 2006-578877	20060511

PRIORITY APPLN. INFO.: FR 2003-13357 A 20031114
WO 2004-FR2912 W 20041115

OTHER SOURCE(S): MARPAT 142:469311

AB Organic complexes containing sitosterols, acylglycerols, and strontium and their use in the fields pharmaceutical and dietetic are disclosed. Methods to treat various diseases, in particular bone or blood diseases, by administration of these complexes is also disclosed. Pharmaceutical compns. containing these complexes, to treat the bone diseases, such as the osteoporosis, and hemopathies is also disclosed. The complexes of the invention was prepared by addition of 1,70 g de sitosterol in 10 mL ethanol, 100 mg of a mixture of 1,2-dioleine and 1,3 dioleine, 840 mg strontium sulfate in 5 mL water, 70 mL soya oil and stirring and warming until ethanol is evaporated

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1908:10343 CAPLUS <<LOGINID::20071115>>

DOCUMENT NUMBER: 2:10343

ORIGINAL REFERENCE NO.: 2:2309f-i,2310a-i,2311a-i,2312a-b

TITLE: Analysis and Chemistry of Fats in 1907

AUTHOR(S): Fahrion, W.

SOURCE: Angewandte Chemie (1908), 21, 1125-34
CODEN: ANCEAD; ISSN: 0044-8249

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Extraction and Determination of Fat. J. Marshall finds a source of error in the use of petroleum ether as a solvent, he having found 7 mg. of a waxy residue in 200 cc. of solvent. R. Fanto distils foaming liquids readily by passing a current of air or inert gas through the flask. Concerning the fat determination in milk, A. Sichler has received several patents on his sinacid butyrometry. Wendler has written about the tannin-salt method for fat in milk, cream, butter and margarine. H. Timpe first shakes the milk with H_2SO_4, then with water and lastly with ether, and then determines the fat by taking the sp. gr. of the ether solution. Baier and Neumann find Wooling's method for fat in milk very suitable. Twenty cc. of milk are acidified with 3 drops of acetic acid, shaken with 4 cc. of ether, and 1 cc. of alkaline copper solution added and then a refractometer reading made. Cream is diluted with milk of known fat content and then treated the same as milk. A Scala finds that there is a loss of fat upon heating cheese with H_2SO_4. Tshaplovitz determines the fat in cacao by heating the powered substance with alcohol in a flask with graduated neck, adding ether, warming, and then making up to a definite volume with ether and taking an aliquot part and evaporating. Determination of Non-fatty Matters. W. Biltz detects traces of water by means of potassium lead iodide which turns yellow with water. A. E. Gray determines moisture in butter by driving off the water with a mixture of amyl acetate and amyl valerianate and collecting it in a cooled graduated tube. A. Trillat holds 20 g. of butter for five days in vacuum or shakes in a graduated cylinder with carbon tetrachloride and reads off the volume of water. Polenske determines small amounts of water in lard by noting the temperature at which the melted fat becomes turbid. This temperature is higher, the greater the water content. Gun and Harrison detected iron in oleic acid by shaking with adrenaline which produces a green coloration. W. Arnold detects traces of azo colors by means of a solution of 1 cc. con. HCl and 99 cc. 95% alcohol. Two cc. are heated with 5 cc. of fat, when the color, if present, will show in the alcohol. Physical Constants: Grun and Schacht say, concerning the double melting points, that mixed glycerides exist in two different forms; a labile form more easily soluble in all solvents and having a lower m. p. than the stable form which is difficultly soluble. The labile form can be recrystallized without changing its m. p. If a particle of the stable is introduced into solution of the labile form, the latter changes to the

stable. The stable form, however, does not change to the labile. After solidification, the double melting glycerides show only one m. p. The change from the stable to the labile modification takes place at room temperature. By slow cooling of the melted substance the stable form is produced direct. Polenske, in order to distinguish between animal fats, makes use of the difference between the m. p. and the solidification point. The figures for tallow are: 12.8°-14.7°, lard 19°-21°, goose fat 17°, butter fat 11.8°-14.3°. C. H. Wright has worked out the coefficient of expansion of oils, fats, and waxes. His formula is d13.5= dT +0.98915/(1-0.0007T). Louise and Sauvage determine the critical solution temperature, using acetone as the solvent. Tortelli has determined the maximum rise in temperature for the maumen.acte.e test to take place in the case of olive, rape, and peanut oil with 30 g. of oil 10 cc. of H_2SO_4, and for poppy seed oil with 50 g. oil and 10 cc. H_2SO_4. Glycerol: According to A. C. Langmuir, the acetin method for determining glycerol in very impure samples is not suitable. In cases of this kind, the glycerol should be distilled in vacuum and the non-volatile impurities determined. F. Zetzsche has found the benzoic acid ester of glycerol to be stable and non-volatile with solvents and has sought to employ it for determining glycerol in beer and wine. G. Goldschmidt finds that the test for arsenic in glycerol by means of $ZnCl_2$ is not very sensitive, owing to the formation of esters. Total Fatty Acid and Free Fatty Acids: B. Margosches concludes from his experiments on phenolphthalein that dissociation is insufficient to explain the fact that a dilute red colored water solution of caustic is decolorized by the addition of concentrate caustic, and that the red color will reappear upon heating or diluting with water. P. Rohland concludes that the ionic theory is sufficient to account for this. Green and King claim that the red compound is not an ion but a salt, and that the quinoid theory is the correct one. G. Buchner and R. Berg are interested in the saponification of beeswax; the former holds that one hour over a free flame with caustic containing not more than 4% of water, is long enough for saponification, while Berg maintains that a longer time for the maximum value is necessary. Henseval and Huwart have shown that the acid value of the total fatty acids from fish liver oils is lower than the saponification number. This is explained by them as being due to the presence of lactones. F. Fahrion has investigated the changes which separated fatty acids undergo by heating above 100 in a drying oven. By autoxidation and polymerization of the unsaturated fatty acids, the acid number and iodine number decrease while the saponification number increases. The products of autoxidation lose water and cause a loss in weight. A good method to obviate this is to convert the fatty acids into the corresponding sodium or potassium salt and to weigh these. E. Richter has noted that the acid number of a mixture of two oils can be below the calculated value. Separation of Fatty Acids: P. Vieth opposes the view held by many that the Reichert-Meissl number of butter fat is never below 24. It is positively known that it is lower in fall and winter and can be as low as 19.9. Svoboda, Morgenstern, Wolbring and Hodgson all agree that Wijsmanwejst's method for the detection of cocoa fat in butter fat is impracticable. F. W. Harris finds the Polenske number valuable for the determination of cocoa fat in butter while M. Siegfeld holds the opposite view. The latter has also investigated the volatile fatty acids of butter, finding a mean molecular weight of 103.5-107.9 for the soluble portion. L. Paulmeyer has found the fatty acids of cocoa fat to consist of 0.25% caproic, 0.25% caprylic, 19.5% capric. 40% lauric, 24% myristic, 10.6% palmtic and 5.4% oleic acid. Several new methods for the detection of cocoa fat in butter have appeared. Av.acte.e-Lallemont determines the volatile fatty acids in the form of their soluble barium salts. J. Bellier employs the magnesium salts instead of the barium salts. The neutral soap solution from 2 g. of butter fat is precipitated by means of

$MgSO_4$, the filtrate acidified with H_2SO_4, the insoluble volatile fatty acids filtered off and titrated and the soluble ones shaken out with ether and titrated. Other Methods of Separation: Lanza, instead of separating oleic from stearic and palmitic acids by pressing, employs a water solution of sulpho-oleic acid which separates the oleic acid as a foamy mass which forms the top layer. A. Leys separates the solid glycerides from lards as follows: 2 g. of lard are heated with 50 cc. glacial acetic acid and 4 g. HgO. Upon cooling, the solid glycerides separate with mercuric acetate, the mass is heated to 50°, 50 cc. absolute alcohol are added and after standing 24 hours the solution is filtered and washed with alcohol and the air-dried residue extracted with 50 cc. of benzol. According to R. Cohn. by repeated salting-out of soap solutions, lauric, myristic, palmitic and oleic acids are completely separated while capric, and caprylic acids remain partly soluble and caproic acid completely soluble and produce a turbidity by addition of HCl. J. Grell separates saturated fatty acids in this manner: The ether solution of the acids is treated with acetyl chloride whereby stearic, palmitic, myristic, and lauric acids yield anhydrides while capric, caprylic and caproic adds yield mixed anhydrides, which upon heating with pyridine and pouring into water remain in solution while the simple anhydrides are precipitated. For the separation of those in solution they are converted into the chlorides by means of PCl_5 and dissolved in a 10% methylamine solution at 0°. The methylamine of caproic acid is insoluble in water; the others are soluble and can be separated as their strontium salts whose solubilities differ.
The stearic and palmitic acids are separated by transforming into their methyl esters whose solubilities differ in methyl alcohol. V. J. Meyer has alcoholized cotton seed oil and distilled the methyl esters which were fractionated in vacuum. Unsaturated Fatty Acids: A. Leys uses a solution of mercuric acetate in acetic acid as a reagent for unsaturated fatty acids. S. F. Popow finds that chloroform is decomposed at higher temperatures by fatty oils. E. Richter has investigated the iodine number according to the Hubl-Waller and Wijs methods. In all cases the results are higher in diffused light than in the dark. In Waller's method 160% iodine in excess are necessary, while in Wijs's method not over 240% iodine should be used. A new constant is the hydrogen number worked out by F. Bedford. Pumice saturated with nickel oxide and reduced with hydrogen serves as the catalyzer, the pumice is heated to 170-80° in an oil bath and the unsaturated fatty acids allowed to drop in while a known volume of hydrogen is introduced. The unused hydrogen is transformed into water by means of CuO, and the portion taken up by the fatty acids expressed in per cent. of the unsaturated fatty acids is termed the hydrogen number. Unsaponifiable Matter: G. Meyer determines the unsaponifiable by precipitating the ethereal fatty acid solution with silver nitrate and evaporating an aliquot portion of the filtrate. If the residue is strongly acid abietic acid is present. F. M. Jaeger finds Bomers phytosterol acetate method unsuitable for quantitative determinations. The unsaponifiable matter of calabar fat contains 90% of alpha phytosterol indentical with the sitosterol of wheat. It forms mixed crystals with the beta phytosterol which can be separated only by chemical means. Pherson and Ruth employ Bomer's method for detecting corn oil in lard, claiming that 2% can be detected. Color Reactions: According to N. Petkov, Becchi's reaction varies in intensity according to the amount of $AgNO_3$ present. E. Gerber finds that the alcoholic extract of benzoin as well as the ethereal extract of vanilla, cloves and cinnamon, give the Baudouin and Soltsien reaction. Lauffs and Huismann maintain that margarine which contains rancid cocoa fat and the legitimate 10% of sesame oil does not give the Baudouin reaction unless cotton seed oil is present. Malagnini and Armanni isolated the substance in sesame oil which causes the Baudouin reaction. H. Rebs detects linseed oil by shaking a benzine solution of the oil with powdered zinc chloride when a

green precipitate is formed. According to K. Charitshkov, all unsaturated substances give colorations with trichloracetic acid.

=> s l2 and py<=2004
L4 7 L2 AND PY<=2004

=> s l4 not l3
L5 6 L4 NOT L3

=> d l5 1-6 ibib abs

L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:204662 CAPLUS <<LOGINID::20071115>>
DOCUMENT NUMBER: 143:138880
TITLE: Pharmaceutical study of Echinophora sibthorpiana Guss.
AUTHOR(S): Gurbanova, Emilia E.; Mammadova, Nargiz H.
CORPORATE SOURCE: Department of Pharmacognosy and Botany, Azerbaijan Medical University, Azerbaijan
SOURCE: Azerbaycan Eczaciliq Jurnali (2004), 4(1), 39-42
CODEN: AEJZAE; ISSN: 1608-1927
PUBLISHER: Bakfarmburo Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: Azerbaijani
AB The phytochem. study of Echinophora Sibthorpiana Guss. grass and water composition has been conducted. It was accordingly specified the content which includes the following: essential oil (1.3%, 0.3%), coumarins - traces; resins - 4.1%, 5.3%; flavonoids and tanning agents in over-ground parts - traces. The phys.-chemical consts. of essential oil has been also determined The study of elemental content of ashes of over-ground part showed that Mg, Ca of macroelements and Zn, Sr, Mn, Fe of microelements prevail. The β-sitosterol substance has been separated and identified from the spirit extract of roots. It was determined that essential oil has antimicrobial characteristics with respect to Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa, Serratia spp., Candida spp.

L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:956874 CAPLUS <<LOGINID::20071115>>
DOCUMENT NUMBER: 142:224391
TITLE: Chemical Characterization of Fine Particle Emissions from the Wood Stove Combustion of Prevalent United States Tree Species
AUTHOR(S): Fine, Philip M.; Cass, Glen R.; Simoneit, Bernd R. T.
CORPORATE SOURCE: Environ. Eng. Sci. Dep., California Inst. Technol., Pasadena, CA, 91125, USA
SOURCE: Environmental Engineering Science (2004), 21(6), 705-721
CODEN: EESCF5; ISSN: 1092-8758
PUBLISHER: Mary Ann Liebert, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Residential wood combustion is an important contributor to ambient fine particle levels in the US. About one-half to 2-thirds of the residential wood combustion in the US occurs in wood stoves as opposed to fireplaces. Thus, any differences between these 2 sources must be accounted for in chemical mass balance receptor models which attempt to determine the contribution of wood smoke sources to ambient fine particle samples. To fully characterize the fine particle emissions from wood stoves and compare the

emissions profiles to those determined from previous fireplace expts., a series of source tests were conducted on the burning of the most prevalent US tree species in wood stoves. The catalyst-equipped wood stove chosen for these tests was operated under both noncatalytic and catalytic conditions to assess the effects of the catalyst on fine particle emissions. Anal. of the wood smoke includes fine particle mass emission factors, organic and elemental C content, ionic and elemental composition, and detailed organic speciation by GC/MS. Between 60 and 90% of the fine particle mass emissions were attributed to measured chemical species. The fine particle emissions from wood stoves show the same general patterns as those from the fireplace combustion of the same tree species; important differences between hardwood and softwood combustion are seen among the substituted phenols and diterpenoids, and levoglucosan is the most abundant individual organic compound emitted. However, fine particle mass emission factors from wood stoves are significantly lower than those from fireplaces. The elemental carbon content of the fine particle mass is generally higher in wood stove smoke than in fireplace smoke, and is even higher when the catalyst was used. A greater fraction of the organic compds. is identifiable by GC/MS methods in the wood stove smoke vs. the fireplace smoke. These results suggest that differences in the source profiles between wood stove and fireplace combustion merit consideration in source apportionment calcns. using organic compds. as tracers.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:535994 CAPLUS <<LOGINID::20071115>>

DOCUMENT NUMBER: 139:201441

TITLE: Characterization of organic aerosols emitted from the combustion of biomass indigenous to south Asia

AUTHOR(S): Sheesley, Rebecca J.; Schauer, James J.; Chowdhury, Zohir; Cass, Glen R.; Simoneit, Bernd R. T.

CORPORATE SOURCE: Environmental Chemistry and Technology Program, University of Wisconsin, Madison, WI, USA

SOURCE: Journal of Geophysical Research, [Atmospheres] (2003), 108(D9), AAC 8/1-AAC 8/15
CODEN: JGRDE3; ISSN: 0148-0227

PUBLISHER: American Geophysical Union

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Throughout southern Asia, biomass is commonly used as a fuel source for cooking and heating homes. Smoke from domestic use of these fuels is expected to be a major source of atmospheric particulate matter in the region and must be characterized for input in regional source apportionment and global climate models. Biomass fuel samples including coconut leaves, rice straw, jackfruit branches, dried cow dung patties, and biomass briquettes manufactured from compressed biomass material were obtained in Bangladesh. Fuel samples were burned in a wood stove to collect and characterize particulate matter emissions. Bulk chemical composition including total organic and elemental C, SO42-, NO3-, NH4+, Cl-, and bulk elements, e.g., K+ and Na+, did not exhibit conclusive differences among biomass samples tested. However, unique features existed in the detailed organic characterization of combustion smoke from different sources. Organic compound particulate matter fingerprints were shown to be distinct from one another and distinct from North American wood fuels. Fecal stanols, including 5β-stigmastanol, coprostanol, and cholestanol, were observed to be good mol. markers for cow dung combustion. Also, methoxyphenol and plant sterol patterns provided a unique signature for each biomass sample and were conducive as source apportionment tracers.

REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:54083 CAPLUS <<LOGINID::20071115>>
DOCUMENT NUMBER: 136:258484
TITLE: Exposure of Reproductively Maturing Rainbow Trout to a New Zealand Pulp and Paper Mill Effluent
AUTHOR(S): van den Heuvel, M. R.; Ellis, R. J.; Tremblay, L. A.; Stuthridge, T. R.
CORPORATE SOURCE: Forest Research, Rotorua, N. Z.
SOURCE: Ecotoxicology and Environmental Safety (2002), 51(1), 65-75
CODEN: EESADV; ISSN: 0147-6513
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Long-term studies on the reproductive fitness of fish under controlled exposure conditions are necessary to address some of the controversy surrounding the field-based studies of pulp and paper effluent effects. This study undertook effluent exposures of 2+ age rainbow trout that were approx. halfway through gonadal growth. Trout were exposed to a mixed thermomech./bleached kraft effluent in 12,000-L flow-through exposure tanks at an environmental research facility located at a pulp and paper mill in Kawerau, New Zealand. Trout were exposed to either upstream river water or 10% effluent in upstream river water and were maintained at a ration of 0.7% of body wet weight during the experiment Results of the 2-mo study indicated that trout survival was not significantly different between effluent-exposed tanks and reference tanks. There was extensive growth during the exposure but no differences were found due to effluent exposure. Gonadal development was not significantly different between treatments. Steroid hormone concns. in males and females were not affected by effluent exposure. The effluent showed no potential to be estrogenic as indicated by a lack of vitellogenin induction in male trout. Other physiol. indicators of energy storage and utilization also showed no significant differences. Modest induction of hepatic 7-ethoxyresorufin-O-deethylase (2.5-fold) was the only detectable biol. effect of the exposure. Biliary concentration of effluent-related compds. were typical of pulp mill effluent exposure and further suggested that the source of phytosterols was in fact dietary and not effluent-derived. (c) 2002 Academic Press.
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:175690 CAPLUS <<LOGINID::20071115>>
DOCUMENT NUMBER: 112:175690
TITLE: Chemical constituents of Actinidia kolomikta
AUTHOR(S): Li, Pingya; Zhang, Jiasheng; Ma, Bingru; Song, Xiuhuan; Tian, Liyu; Xiao, Guoshi
CORPORATE SOURCE: Dep. Chem., Norman Bethune Univ. Med. Sci., Changchun, Peop. Rep. China
SOURCE: Baiqiuen Yike Daxue Xuebao (1989), 15(5), 474-5
CODEN: PEIPDB; ISSN: 0253-3707
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Daucosterol and β- sitosterol were detected in exts. from the root of A. kolomikta. Twenty-six inorg. elements were determined from the leaves, branches, stems, roots, cortex of roots, and root hair of A. kolomikta.

L5 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1974:58781 CAPLUS <<LOGINID::20071115>>
DOCUMENT NUMBER: 80:58781
ORIGINAL REFERENCE NO.: 80:9541a,9544a
TITLE: Tracer microspheres as a fecal marker in balance studies
AUTHOR(S): Carmichael, R. H.; Crabtree, R. E.; Ridolfo, A. S.; Wolen, R. L.
CORPORATE SOURCE: Lilly Lab. Clin. Res., Marion Cty. Gen. Hosp., Indianapolis, IN, USA
SOURCE: Clinical Pharmacology & Therapeutics (St. Louis, MO, United States) (1974), 14(6), 987-91
CODEN: CLPTAT; ISSN: 0009-9236
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 51Cr- and 85Sr-labeled microspheres were compared to Cr2O3 and β-sitosterol as fecal markers. Both markers were chemical inert, uniformly distributed in feces, and fully recoverable. The advantages over the other markers were min. handling of specimens and direct measurement without complex anal. procedures.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	41.14	41.35

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.02	-7.02

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:31:41 ON 15 NOV 2007